

WORK SHEET FOR STEPWISE CALCULATION (SUBSURFACE) PRESSURE (P_f & P_s)
(SURFACE) (P_g & P_w)

Form C-122-E
Adopted 9-1-65

Standard Oil Company

COMPANY of Texas LEASE Bogle Flats Unit '4' WELL NO. 2 DATE 6-6-66

LOCATION: Unit J Section 4 Township 22S Range 23E

L 7039 H 7039 L/H 1.000 G .639 % CO₂ .58 % N₂ .91 % H₂S .21

d 2.441 F_i 0.010763 Q_m 4.699 M²cfd (L/H) (F_iQ_m)² .002558 P_{cr} 673 T_{cr} 364
TABLE IX & X TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	3468	6936			Delta P = 3 (37.5 GH)				
2	GH		0	2216.05	4432.10			I _t + 4 I ₁ + I ₂				
3	37.5GH		0	83,102	166,204							
4	P _c or P _n		2269.2	2525.2	2780.2			= 3 (166,204)				
5	P _r		3.37	3.75	4.13			162,204 + 651,736 + 163,090				
6	T		532	562	591			= 498,612				
7	T _r		1.46	1.54	1.62			977,030				
8	Z		.746	.790	.828							
9	P/Z P/Z		3041.8	3196.5	3357.7			P _s = P _t + Delta P				
10	P/TZ		9.6	5.7177	5.6814							
11	(P/TZ) ² /1000		.032692	.032350	.032278			= 2269.2 + 510.3				
12	L/H(F _i Q _m) ²		.002558	.002558	.002558							
13			.035250	.034908	.034836			= 2779.5				
14	I _n		162.204	162.934	163.090							
15	M=P _n -P _{n-1}		256	255								
16	N=I _n +I _{n-1}		325.138	326.024								
17	M x N		83,235	83,136								
18	Σ (M x N)		83,235	166,371								

RECEIVED

JUN 27 1966

D. E. C. ARTELLA, OFFICER